B371-A-000174

WESTMINSTER

January 22, 2004

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Re: Proposed Modifications to the Rocky Flats *Building 371/374 Decommissioning Operations Plan, Revision 1 Modification 4 (DOP Modification)*, dated November 18, 2003

Dear Ms. Foss,

On behalf of the City of Westminster, I am submitting the following comments on the *Building 371/374 Decommissioning Operations Plan, Revision 1 Modification 4 (DOP Modification).* The City appreciates the opportunity to provide feedback on this proposed change in the decontamination strategy for Building 371 and Building 374 (B371/374), and we look forward to receiving your written reply. Wording in italics in this letter are quotes from the DOP.

Documents approach

We are concerned that the site continues to do a piecemeal approach to the remedy vs. a holistic approach. We understand that the remediation of B371/374 is interrelated with a number of issues, including groundwater movement and contamination, erosion potential, hill slope stability, final land configuration; the building demolition plan and results of sampling and analysis. During briefings on the proposed remedy, many of these details were not yet known, not available for review or there were contradictory statements made. As an example, during the briefing from Kelly Trice to the RFCLOG Board on December 1, he said that there were no surface water or groundwater problems associated with B371. At the same meeting, Joe Legare said that the site needed to establish stable drainages and used the drainage near B371 as an example. Also, at the Water Working Group meeting on January 8, we were told that there is a possibility that the groundwater flow in the area will most likely increase.

In addition, without having the details of a demolition plan to review, one cannot determine if the proposed remedy is obtainable as recommended.

Proposed decontamination

This proposal to decontaminate the basements to the radionuclide action levels represents a significant departure from the earlier plan to decontaminate the entirety of both buildings to the free release standard. We are very concerned

that the site is taking this approach since we made it known that we did not want the use of this approach, which was initially proposed for B771/774, to set precedence for other buildings. To allow contaminated basements and/or foundations to remain will have long-term stewardship responsibilities, especially if the foundations are within areas of shallow water tables.

During the presentation to the RFCLOG Board on January 5, we were given a handout that stated,

"Yellow: In-situ gamma spectroscopy samples performed in these areas show activities between 1 nCi/gm and 100 nCi/gm at the surface..."

"Orange: Surveys or in-situ gamma spectroscopy samples performed in these areas show activities greater than 100 nCi/gm at the surface or greater than 7 nCi/gm averaged over the slab."

"Assuming these rooms were decontaminated to a minimum of 100 nCi/gm at the surface (typically the most restrictive limit)..."

We have no idea why the site believes that 100 nCi/gm as typically the most restrictive limit, but in **NO** way do we support leaving surface contamination of up to 100 nCi/gm as proposed. The approach to take the surface level contamination and divide it by the total weight of concrete that it overlays to arrive at a final activity level is not supported. The RFCA does not allow any contamination of this magnitude. Any contamination must be cleaned up to less than the limits specified in the RFCA.

What is the total expected quantity of residual contamination (activity level) that will be left in the walls, foundation and slabs?

Explosives

We have commented in the past that we do not support the use of explosives to demolish a building that does not meet the 'free release" criteria. In addition, the use of explosives on any Type 3 facility was not and is not supported. The site needs to include the use of mechanical decontamination (concrete shaving) in the alternatives analysis.

Leaks:

In discussions with former workers in B371, have the following areas been adequately sampled and characterized to ensure that there are no possible long-term effects:

- Areas where there were black iron piping leaks
- Leaks from the large tanks in Room 1117
- Leaks from transfers through the walls where the solution being transferred did not arrive at the tank it was being sent to

Please provide verification of this.

When referencing other documents, please site the section and page number(s) from the document that you are referring to.

Long-term Stewardship:
Again we must speak out on the lack of long-term stewardship not being fully analyzed in the DOP. We understand that it is the site's preference to delay specific LTS criteria to closure documents such as the CAD/ROD. While this is the sites preferred method of handling LTS, we still maintain that each proposed remedy selection should include detailed LTS planning. To ensure long-term protection and viability of this proposal and integration with the northern Industrial Area, Westminster expects to be involved with final stewardship decisions. We anticipate the details of the stewardship analysis will be provided to us so we are able to make informed decisions associated with the protection of water quality. We anticipate further dialogue regarding stewardship and the enforceability of the long-term stewardship criteria.

Lessons Learned
Add a section that discusses how lessons learned from other buildings (i.e., B771, B883 and B865) will be applied to the demolition of B371/374.

Additional Information required
We require the following additional information: the groundwater modeling scenarios and the potential for seeps to form; a more detailed engineering design of the backfill operations; the proposed land configuration design to ensure the stability of the area over time; the details of the groundwater management systems; the results of the sampling and analyses; the building demolition plan; and, a more detailed and thorough alternatives analysis as to why explosives are preferred over mechanical demolition in order to evaluate the proposal. We look forward to receiving this information in a timely manner as it is developed. The City will not support the current 371/374 proposal until receiving and satisfactory reviewing the above information and the following items being adequately addressed and evaluated prior to demolition of B371 and B374.

SPECIFIC COMMENTS

Section 1.1.1.2 Alternative 2: Decontamination consistent with Modifications to RFCA Attachments, approved June 2003, page 5
"The second zone would be 6 feet below the ground surface, and this zone would be decontaminated to bring the concrete to less than 7 nCi/g."

RFCA, Attachment 5, Page 5-3 states, "If plutonium-239/240 and americium-241 soil contamination is found in the 3-6 foot depth interval at activity

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concentrations greater than 7 nCi/g, it will be removed to an activity concentration less than 1 nCi/g without additional sampling to determine the areal extent. For contamination between 3 and 7 nCi/g, the areal or volumetric extent of contamination will determine if an action is required. The contaminant levels and areal or volumetric triggers are listed below."

Contamination Level (nCi/g)	Arial Extent Limit (m^2)	Volume Extent Limit (m^3)
7	0	0
6	40	25
5	50	31
4	60	37
3	80	50

This clearly states that any contamination greater than or equal to 7 nCi/gm is not allowed. Therefore, where the site proposes to leave 7 nCi/gm, we require that the area be decontaminated to less that 1 nCi/gm per RFCA. The City will not support any contamination being left in place that is in conflict with the above.

4.2.4, Pre-Demolition Survey, page 20

"DOE and/or the LRA will conduct an independent verification (IV) of the characterization data."

The City wants to again emphasize the need to have Independent Verification and Validation (IVV) performed of the pre-demolition survey and of the characterization of the remaining slab and walls left with potential residual contamination. We believe an IVV is necessary because the building may not be cleaned to free release criteria. The independent verification and validation will ensure us that adequate analysis and characterization has been performed to document the amount of residual contamination remaining post-closure. The IVV of the pre-demolition survey must be completed before any demolition is begun.

4.2.4, Pre-Demolition Survey, page 21

"An IVV survey may be performed on an established percentage of survey units following completion of the PDS."

Change the word "may" to "shall".

4.4.2 Removal of the CSV and I/O Stations, page 34

"Additional decontamination will be performed, as necessary, until surface areas meet the applicable less than 7 nCi/g criteria described in the RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities."

This is the wrong reference as there is no mention of the 7 nCi/gm criteria in the "RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities," that I am able to find. Provide the correct reference. We do not support this limit (see above).

4.5 Facility Demolition, page 41
"Facility demolition will be accomplished using a variety of mechanized equipment combined with the engineered and controlled use of explosives."

We reiterate that we do not support the use of explosives to demolish a building that does not meet the 'free release" criteria. In addition, the use of explosives on any Type 3 facility is not supported.

"During demolition, airborne dust will be monitored on a visual presence or absence criterion, with dust control water spray being applied as required from a fire hose equipped with a fog nozzle."

Describe how the run-off water will be controlled. Will the water be sampled? If relying on visual presence or absence criterion for dust control, the City requires that the Site have person who is State certified per 5CCR 1001-3, Section 11.A.1, to conduct such visual determinations. The required controls and DQOs must be established in accordance with the Air Quality Management Plan and detailed in this section.

4.5.5, Demolition of Structures and Appurtenances Specific to Building 371/374, page 46
"The transformers are all placarded as being PCB-free."

Will this be verified?

4.5.6, Demolition of the Main Portion of Building 371, page 48
"Explosives"

As stated earlier, we have commented in the past that we do not support the use of explosives to demolish a building that does not meet the 'free release" criteria. In addition, the use of explosives on any Type 3 facility was not and is not supported.

4.5.6, Demolition of the Main Portion of Building 371, page 48
"Backfill operations may involve soil, recycled concrete and/or flowable fill."

How will you verify that voids have been filled and that there are no voids remaining after backfill operations? Detail how the site will ensure the fill is compacted per standard criteria to prevent subsidence. We need further information about this process because groundwater will form a pathway with

least resistance and create a void. How will the alternative proposed method meet compaction criteria and associated QA/QC?

4.5.8 Project Cleanup, Demobilization, and Post-Demolition, page 49

"It is anticipated that the groundwater control measures could include French drains, erosion control matting, and/or groundwater flow through areas punched through the Building 371/374 superstructure."

Groundwater modeling should be performed to model what the effects would be with complete building removal. In addition, we are concerned about possible seeps appearing on the northeast side of the building. What about the past TCE problems in the area? What is the groundwater level relevant to the depth of the basements?

Add a section to the DOP to include the details of the groundwater management systems for the B371/B374 project. Include the details of the cover for the slab, the french drains, and how groundwater flow will be managed.

Will the holes impact the integrity of the superstructure? Clarify how groundwater flow through the holes will not increase the potential for erosion of the concrete, thus releasing contaminated particles into the groundwater.

The footer drains in this area of B371 are constantly going. What effect does this have on groundwater after remediation? Clarify if the footer drains will be left in place as per the B371/B374 plan or if they will be dispositioned per the Environmental Restoration RFCA Standard Operating Protocol (ER RSOP). Provide Westminster with characterization data of the footer drains. If the footer drains or sumps are contaminated, what are the plans to utilize the footer drains or sumps?

At the Water Working Group meeting on January 8, we were told that there is a possibility that the groundwater flow in the area will most likely increase. Also, they stated that holes would most probably have to be inserted into the B371 foundation walls because of the head pressure that would result from the groundwater. If these holes are placed into the foundation walls, would the proposed fill method not be a natural "French drain"? Detail how the groundwater would be captured, routed, and treated.

Lack of sufficient detail as to the effects of groundwater and the results of the groundwater modeling are of concern to us.

4.5.8 Project Cleanup, Demobilization, and Post-Demolition, page 50

"If there is a substantial delay between the grading effort and the final seeding, measures will be taken to minimize erosion during the delay. Temporary measures could include interim vegetation, erosion control mats, application of

surfactant and/or crimping the area with straw."

Erosion controls should be identified in the DOP to ensure the stability of the hill slope. While the DOP identified some of the controls, it does not identify the details. The details of the drainage layer and where the flow from this layer will be directed should be identified in the DOP. What is the final slope of the hillside? An Erosion Control Plan should be developed and approved for this area prior to remediation. Add the Erosion Control Plan as an appendix to the DOP. Provide Westminster with the erosion modeling performed for the hillside. Clarify if wet or dry years were modeled and what the erosion rates were during the modeling. Not knowing the final land configuration of this area, at what point in time would there be a potential for slabs to be exposed if they are between 3-6 feet in depth? We appreciate the revisions to the DOP to include the near-term erosion controls, but they are not specific enough to ensure the stability of the hillside.

5.4, Waste Minimization and Recycling, page 60

"Structural rubble (i.e., concrete) generated during decommissioning will be recycled as fill material to contour the land when decommissioning activities are completed."

Change to read as follows, "Structural rubble (i.e., concrete, meeting free release criteria)..."

The City has voiced its concerns in the past with the proposal to put-back remediated contaminated soils or materials and dispose of them on-site. The goal of remediation should be source removal, not blending materials and burying them on-site. We once again want to emphasize any soils or materials above the action level of 50 pCi/g should not be disposed of on-site or used as backfill material. We have worked diligently with the RFCA parties to identify contaminant actions levels for different depths for remediation. The intent of identifying the action levels was for remediation, not to be used as a level for put-back of contaminated soils.

Provide the details for the maximum volume, maximum storage time of waste piles, sampling of incidental water, protection methods of debris from the elements, compaction criteria for berms, responsible organization for the management of the piles, and inspection of the piles.

7.0, APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS, page 63

"Certain State of Colorado Radiation Control Regulations pertaining to decommissioning and environmental releases may be relevant and appropriate to building decommissioning and environmental restoration activities, particularly the cleanup of soils. The parties to RFCA are in the process of negotiating a final

list. Appendix A will be modified, as appropriate, when they reach agreement on the final list."

This list needs to be finalized and included in Appendix A, before the DOP is approved.

8.2, Air Quality, page 66

"The existing RAAMP sampler network will be used for ambient air monitoring during removal activities."

"In addition to the perimeter network, project monitoring (PM-Rad) will be carried out during demolition and removal activities using ten existing RAAMP samplers arrayed around the Industrial Area of the Site."

Can the site guarantee that all of the existing RAAMP samplers will still be operational at the time of the facility demolition? If not, a detailed plan for air sampling needs to be incorporated in this section. Additional sampling replicating that, which was performed on B865, shall also be included.

"...if Action Level 2 is exceeded, and will meet with project personnel to reassess project parameters and evaluate measures to mitigate future emissions."

Add a sentence after this one that states, "The LRA and local communities will be notified of the exceedance."

Identify the document that will capture the air monitoring data quality objectives and sampling criteria. Will the Colorado Department of Public Health and the Environment (CDPH&E) or the Environmental Protection Agency (EPA) be performing additional air quality monitoring? Westminster requests the Integrated Monitoring Plan (IMP) be revised as soon as possible to reflect the requirement of additional project-specific air monitoring during dirty demolition activities, i.e., detailing how close-in air monitoring will be conducted. As a minimum, the same type of sampling that was used on B865 should be accomplished.

8.3, Water Quality, page 68

"...high winds or severe rains occur,"

Define high winds and severe rains.

Westminster continues to be concerned with the work planning and execution of protecting surface water from contaminated groundwater within the area. The DOP is not specific enough to address the potential degradation of groundwater or surface water. The plan does not address how run-on and run-off will be

addressed when areas are being remediated with contaminated slabs or adjacent to contaminated areas that will not be remediated.

The Site had made a commitment to provide us with information such as the groundwater modeling and land configuration design for this area. Please provide the City with the additional information we requested to evaluate the impact to surface water quality in this area. We also request additional information performed by the Actinide Migration Evaluation group such as the effect of actinide transport in the presence of volatile organics.

The groundwater modeling, backfill design, and land configuration plan will provide the City with the data and information to determine the need for additional groundwater wells in the area. D&D wells have been established in the area and the new backfill plan may require the need to relocate the D&D wells. Clarify if the groundwater modeling information acknowledges the need to reposition the D&D wells. If the wells have to be repositioned, the Site will have to perform additional baseline monitoring prior to remediating the area. We ask that the Site utilize the IMP process to identify the data quality objectives of the wells. We also recommend the objectives include triggers to determine when evaluations and/or remediation actions are required. As an asset holder, Westminster wants to ensure the water quality of Walnut Creek, which flows through our City, is protected.

Add a section to the DOP to include the details of the groundwater management systems for the B371 project. Include the details of the cover for the slab, the french drains, and how groundwater flow will be managed.

Clarify if the footer drains will be left in place as per the plan or if they will be dispositioned per the Environmental Restoration RFCA Standard Operating Protocol (ER RSOP). Provide Westminster with characterization data of the footer drain. If the footer drains or sumps are contaminated, what are the plans to utilize the footer drains or sumps?

"The mobility of the fixed contamination that could be dislodged during the demolition process is negligible."

We do not agree that the mobility of the fixed contamination that could be dislodged during the demolition process is negligible.

11.1 CERCLA Administrative Record File, page 75

The City once again emphasizes the need to keep the College Hill Library as the official record repository for Rocky Flats.

11.4 Decommissioning Final Closeout Report, page 76

We want to thank the Site for revising the DOP to include utilization of the global position system location of the B371/B374 structure remaining underground and a reference to the final characterization report, which details the nature and extent of the contamination remaining on the structure. We appreciate the efforts the Site and the regulators have made to enhance the information in the Decommissioning Closeout Reports. The City envisions the information in the closeout reports to be used as an information management tool post-closure to assist with source identification in the event of contaminant migration.

Appendices
The City needs to see Appendices A – D.

Thank you for the opportunity to comment on this crucial document. The City of Westminster expects that we will continue to be involved, informed, and allowed to participate in the revisions, both major and minor, to the DOP. If you have any questions, please feel free to contact me at 303-430-2400, X2174.

Sincerely yours,

Al Nelson
Rocky Flats Coordinator

cc: Sam Dixion, City Councillor, City of Westminster
Jo Ann Price, City Councillor, City of Westminster
Ron Hellbusch, Director Public Works and Utilities, City of Westminster
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